UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION

PARKERVISION, INC.	C.A. No. 6:20-cv-108-ADA
	JURY TRIAL DEMANDED
	PUBLIC VERSION
INTEL CORPORATION	██████████████
Defendant.	

DEFENDANT INTEL CORPORATION'S RESPONSE TO
PLAINTIFF PARKERVISION, INC.'S MOTION TO EXCLUDE
CERTAIN EXPERT TESTIMONY OF DR. VIVEK SUBRAMANIAN

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I.   INTRODUCTION

Dr. Vivek Subramanian is a highly qualified expert in electrical engineering and radio frequency (RF) systems who concluded that (1) the Intel products do not infringe and (2) if ParkerVision's infringement theories were accepted, the asserted claims would be invalid over the prior art. Dr. Subramanian reached his conclusions after extensive analysis including, among other things, speaking with former Intel engineers, including the engineer who ███████████████ ██████, Ex. 1 at 271:18-274:14, and two other engineers who ███████████████████ ██████, *see, e.g.*, Ex. 2 at 21:16-26:25.[1] Dr. Subramanian also performed computer simulations to model the operation of the Intel products. Indeed, to validate his simulation methodology and results, Dr. Subramanian also ran a second set of simulations with the same circuit configurations and component values used by ParkerVision's expert, Dr. Michael Steer, and this second set of simulations further confirmed Dr. Subramanian's results and noninfringement conclusions.

Recognizing that there is no basis for its infringement allegations, ParkerVision now makes reckless and unfounded allegations, accusing Dr. Subramanian of everything from using "made up" component values to lying at his deposition. These accusations are unsupported by any evidence and/or rely on highly misleading and out-of-context citations. ParkerVision's mudslinging cannot overcome the fact that Dr. Subramanian performed exacting simulations that conclusively show ParkerVision has no infringement case. For all ParkerVision's sound and fury about alleged simulation "errors," ParkerVision does not even allege, much less show, that any of these supposed "errors" had any effect on Dr. Subramanian expert conclusions—an allegation ParkerVision cannot make because Dr. Subramanian further confirmed his simulation results and non-infringement conclusions ***using ParkerVision's own expert's simulation setup***.

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[1] All exhibits are attached to the Declaration of Harry Hanson, filed concurrently herewith.

ParkerVision claims Dr. Subramanian "purposefully" tries to "mislead the jury" by using component values he "made up" based on discussions with three Intel engineers, two of whom ParkerVision suggests were not knowledgeable about the Intel products. Dkt. 177 ("Mot.") 2-3, 5. But those engineers were either directly responsible for ███████████████████████ ███████████████████████████████. *See, e.g.*, Ex. 1 at 26:18-29:9, 44:13-47:23, 271:18-272:17 (Dr. Werner Schelmbauer ████████████████████████████ █████████); Ex. 3 at 40:17-41:1 (Dr. Christopher Hull ████████████████████ █████████); Ex. 2 at 11:16-15:8, 21:16-26:25 (Dr. Bernd-Ulrich Klepser ████████████ ███████████████████████████████████████). Further, Dr. Subramanian's second set of simulations—which used the same circuitry and values that ParkerVision believes are proper—generated the **same results** as his own simulations, thus confirming that the difference between the two simulation setups had no impact on his conclusions.

ParkerVision also accuses Dr. Subramanian of "recanting" testimony about running simulations "without [a] transmission line" or with Dr. Steer's preferred "source resistance" and "transistor width." Mot. 8, 12-13. But Dr. Subramanian consistently testified that ██████ ███ ██████ *See, e.g.*, Ex. 4 at 675:6-22. ParkerVision conflates testimony about **different categories of simulations** to suggest Dr. Subramanian testified inconsistently. There is no inconsistency, and there was no reason to recant anything because his testimony was consistent and accurate.

As to Dr. Subramanian's invalidity opinions, ParkerVision argues he should have also run simulations to show invalidity "[g]iven Dr. Subramanian's view that simulations were **necessary** to show non-infringement." Mot. 22.[2] But Dr. Subramanian never stated that simulations were

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[2] All emphases added unless stated otherwise.

"necessary" to show noninfringement, which is why ParkerVision can cite nothing to support this assertion. ParkerVision also argues, citing district court cases from 2016, that Dr. Subramanian cannot offer the invalidity conclusion that if the claims are expanded to allegedly cover Intel's products (as set forth in ParkerVision's infringement contentions), then the asserted claims would be invalid. But the Federal Circuit held **in 2018** that such invalidity opinions are entirely proper. *See 01 Communique Lab'y, Inc. v. Citrix Sys., Inc.*, 889 F.3d 735, 741-742 (Fed. Cir. 2018).

ParkerVision's criticisms of Dr. Subramanian are all demonstrably wrong, fail to show any legitimate questions with his conclusions, and do not come close to meeting the standard for exclusion. *See Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1299 (Fed. Cir. 2015) ("Where the methodology is sound and the evidence relied upon is sufficiently related to the case, disputes over the expert's credibility or over the accuracy of the underlying facts are for the jury.").

II.   BACKGROUND

The asserted claims are directed to "down-conversion." Dkt. 51 at 4. ParkerVision and Dr. Steer have acknowledged that Intel's method of down-conversion ("mixing") is "fundamentally different" from the method required by all the asserted claims ("sampling"). *See* Ex. 6 at 22; Ex. 7 ¶179. In fact, Dr. Steer admitted that in the context of digital signal processing, the Intel products ██

██ Ex. 8 at 297:4-8.

Consistent with those and similar admissions, Dr. Subramanian concluded that none of the Intel products infringe any asserted claim because they do not include multiple fundamental claim elements. To reach his conclusions, Dr. Subramanian relied on a combination of technical documentation, sworn testimony and filings, his own extensive expertise in the field, and numerous computer simulations of the operation of the relevant circuitry in the Intel products.

Dr. Subramanian also spoke with three former Intel engineers who are intimately familiar with the design and operation of the Intel products. He spoke with Dr. Werner Schelmbauer, who

██. Ex. 1 at 47:2-23, 49:25-50:10, 271:18-272:17. He also spoke with Dr. Uli Klepser, who ███████████████████

███ Ex. 2 at 11:16-15:8, 21:16-26:25. Finally, he spoke with Dr. Christopher Hull, who ███████████

███ Ex. 3 at 16:6-17:23, 36:15-45:15 ████████████████████████. All three engineers were also deposed or interviewed by ParkerVision (some multiple times). Indeed, ParkerVision's own expert cites or refers to their testimony **over 150 times** in his opening expert report.

Dr. Subramanian also verified his conclusions by running two categories of simulations:

- **Category One**: Dr. Subramanian prepared his own simulations based on his review of technical documents, his conversations with the above engineers, and his own extensive experience and expertise in the field of electrical engineering and RF circuitry.

- **Category Two**: Dr. Subramanian ran separate simulations using the native simulation files (and therefore using the same circuit configurations and component values) that *ParkerVision's expert*, Dr. Steer, used to simulate the Intel products.

Dr. Subramanian determined that both simulation categories fully supported his non-infringement conclusions. In short, by using the same configuration and values as *ParkerVision's expert,* Dr. Subramanian further confirmed the reliability of his own simulations and conclusions.

For example, one of Dr. Subramanian's noninfringement conclusions is that the Intel products do not infringe because ██

████████████████████████. By contrast, ParkerVision's expert Dr. Steer has acknowledged that

in ParkerVision's claimed "energy sampling" invention, "[t]here is a not a down-converted signal after the [mixer]." Ex. 8 at 300:15-25. Accordingly, Dr. Subramanian ran simulations to determine whether the current after the ███

███████████████████████████████ The results of both categories of Dr. Subramanian's

simulations are shown in the figures below, ███████████████████████████████████

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Ex. 9 ¶¶807, 829 (red text added). At left is Dr. Subramanian's Category One simulation—a simulation using his own setup—which shows ████████████████████████████████

██████████████████████████. At right is Dr. Subramanian's Category Two simulation—a simulation using Dr. Steer's setup—which also shows ███████████████████████

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██, demonstrating that

Dr. Subramanian's noninfringement conclusion is valid regardless of whose setup is used.

Dr. Subramanian's rebuttal expert report includes hundreds of pages of simulation results, detailed descriptions of the software and code he used, and numerous diagrams and tables detailing the component configurations and values he input into that software. Crucially, he also provided the underlying simulation *native files*, from which ParkerVision could identically replicate his

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simulations on its own computers and change any or all inputs to assess if doing so would affect the results. In short, Dr. Subramanian provided everything needed to understand, replicate, alter, and cross-examine him about his simulation methodology, inputs, results, and conclusions.

At deposition, ParkerVision's expert Dr. Steer testified that he believed Dr. Subramanian's Category One simulations contained one incorrect component and certain incorrect component values, despite Dr. Subramanian verifying his setup with engineers who, by Dr. Steer's own admission, ███ Ex. 8 at 290-291. However, Dr. Steer did not—and **_could not_**—testify that any of these purported "errors" affected Dr. Subramanian's ultimate results or conclusions, because Dr. Subramanian reached all the same results and conclusions using **_Dr. Steer's own setup_** (i.e., the Category Two simulations).

When Dr. Subramanian was subsequently deposed, he was asked about Dr. Steer's criticisms of his Category One simulations. Dr. Subramanian testified that the criticisms were unfounded because, among other things, he had ████████████████████████

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After his deposition, ParkerVision demanded that Dr. Subramanian produce additional files beyond the dozens of native simulation files that he had already produced with his expert report. Specifically, ParkerVision requested files that Dr. Subramanian had used, when preparing his report, to ████████████████████████████████████. Intel responded that ParkerVision had misinterpreted Dr. Subramanian's testimony and that, in any event, there is no

obligation under Rule 26 to produce such work product generated in the preparation of an expert report, particularly where ParkerVision already has the native files that Dr. Subramanian used to generate the results in his expert report, allowing ParkerVision to change any aspect of those simulations if ParkerVision believes that doing so will undermine his results. Nevertheless, Intel offered to consider a ***mutual exchange*** of expert preparatory files, but ParkerVision refused.

III.   DR. SUBRAMANIAN'S NONINFRINGEMENT CONCLUSIONS ARE PROPER

A.   Dr. Subramanian's Simulations Are Based On Sufficient Facts And Data.

ParkerVision argues that Dr. Subramanian's Category One simulations deviate from how the Intel products "actually work." Mot. 1. ParkerVision's arguments boil down to unfounded complaints about the accuracy of his input values—i.e., circuit configurations and component values. These arguments are wrong, fail to show any legitimate questions with his conclusions, and in all cases are not a proper basis for exclusion. *See Summit 6*, 802 F.3d at 1299 ("[D]isputes over the expert's credibility or over the accuracy of the underlying facts are for the jury.").

     1.   ████████████

ParkerVision first criticizes Dr. Subramanian for including in his Category One simulations of ██ Mot. 6-8, 14. But as Dr. Subramanian testified, ████████████████████████████████

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ParkerVision wrongly suggests that these engineers may not have worked on the relevant circuitry for the Intel products. Mot. 6, 8. But they ██████████████████████

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██████████████████████ *See supra* Section II. ParkerVision also claims that Dr. Subramanian "admitted that he blindly followed" these engineers, but the ***same testimony*** ParkerVision cites contradicts this claim. Mot. 7-8 (citing Ex. 5 at 160:7-162:6). Dr. Subramanian testified ████████

██ Ex. 5 at 162:4-6 ██

ParkerVision also claims Dr. Subramanian did not know if the engineers with whom he discussed the transmission line "worked on the relevant [circuitry]," and did not "independently" verify his decision to include this component. Mot. 7-8 (citing Ex. 5 at 162:7-164:5). Again, the testimony ParkerVision cites contradicts its claim. Ex. 5 at 162:14-163:17 ████████████████

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ParkerVision next argues that Dr. Subramanian ██████████████████████ to somehow support his conclusion that the circuit elements that ParkerVision alleges ██████████████

██ Mot. 7. Specifically, ParkerVision accuses Dr. Subramanian of "knowingly" ████████████████████████████

██████████████████████ *Id.* But ParkerVision provides no evidence that ██████████████

████████████████████████████████ Moreover, Dr. Subramanian's Category Two simulations show that his conclusions ██

Low-pass filters remove high-frequency noise from signals. Accordingly, to determine

whether ███

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Ex. 9 ¶¶753 (left), 763 (right) (red annotations added). As shown on the left, ██████████

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██ But as shown on the right,

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Finally, ParkerVision accuses Dr. Subramanian of "recanting" testimony about simulating

the Intel products ████████████████████████ Mot. 8 (citing Ex. 4 at 453:8-457:6). Again,

ParkerVision's claims are contradicted by the cited testimony. Dr. Subramanian testified that ██

██ Ex. 4 at 455:16-456:7; *see also*

Ex. 5 at 155:22-156:6 ██

██████████; Ex. 4 at 442:18-443:6, 675:6-22. By contrast, he testified consistently that ████████

██ Ex. 5 at 168:2-169:2 ████████

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████   In short, ParkerVision misleadingly compares testimony about ***different categories of simulations*** to suggest that Dr. Subramanian recanted testimony. He did not recant anything.[4]

2.   ████████████████

ParkerVision next claims that Dr. Subramanian's Category One simulations used the wrong ████████████████ Mot. 9. But Dr. Subramanian ████████████████████████

████████████████████████████████ *See* Ex. 9 at 159. ParkerVision criticizes him for not recalling which former Intel engineer verified████████ But a deposition is not a memory test, and ParkerVision cites nothing showing that his ████████ was incorrect, or that another was more appropriate. Instead, ParkerVision just makes a conclusory statement that████████████

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████████████████████████ Mot. 10. ParkerVision cites nothing to support this assertion. Moreover, ParkerVision does not—and ***cannot***—claim that the ████████████████████

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3.   ████████████████ .

ParkerVision next claims that Dr. Subramanian's Category One simulations had the wrong ████████████████████████████ Mot. 10-12. But Dr. Subramanian testified that ██

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[4] By contrast, Dr. Steer did recant testimony in his deposition—categorically reversing himself after being shown evidence that belied his assertion that an Intel document indicated that an Intel product was a sampler. *See* Ex. 11 at 240:9-11 (first testifying that "I know [Exhibit 16] relates to SMARTi 5"); *id.* at 266:5-22 (later testifying, after being confronted with contradictory evidence: "I understand now … that the architecture shown in Exhibit 16" is "not the SMARTi 5").

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██ Ex. 5 at 193:7-194:1.

ParkerVision omits this testimony from its brief. *See* Mot. 10 (selectively citing Ex. 5 at 192-196).

Indeed, many of ParkerVision's criticisms on this issue are directly contradicted by the

same testimony ParkerVision cites. For example, ParkerVision claims ██████████████████

██████████████████████████ Mot. 10 (citing Ex. 5 at 194:22-195:22). But in the cited

testimony, Dr. Subramanian stated: ███

Ex. 5 at 195:2-3. ParkerVision also claims Dr. Subramanian "*assumed*" Dr. Hull "had knowledge"

of the █████████ Mot. 10 (citing Ex. 5 at 195:6-22). But in the cited testimony, Dr. Subramanian

stated: ███ " Ex. 5 at 195:19-22. Indeed,

Dr. Hull testified that █████████████████████████████████████

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██ Ex. 3 at 39:11-41:1.

ParkerVision claims, citing a single document, that █████████████████████████████

██████████████████████████ ." Mot. 10-11. But the cited document indicates, at most, █

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ParkerVision asserts that ███████████████████████████████████████

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█████████ Mot. 10. But again, ParkerVision cites nothing to support this statement. Moreover, ParkerVision again does not—and *cannot*—claim that changing the ████████ ██████ would affect Dr. Subramanian's noninfringement conclusions, since Dr. Subramanian also ran his Category Two simulations that used ████████████████████████████ and those simulations yielded the same ultimate results and non-infringement conclusions.

Dr. Subramanian concluded that the Intel products do not infringe because, for example, they do not perform ████████ To reach this conclusion, he relied in part on simulations showing that ██

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Ex. 9 ¶573; *id.* App. B ¶22 (purple annotations added). Regardless of whether the Intel products are simulated with ████████████████ (i.e., Category One) or ████████████████ (i.e., the Category Two simulations above), ████████████████████████, further verifying Dr. Subramanian's conclusion that the Intel products do ████████ and do not infringe.

Finally, ParkerVision claims Dr. Subramanian "recanted" testimony and ███████████

████████████████████████████ Mot. 11-12. These claims are directly contradicted by

the testimony ParkerVision cites (and, indeed, by the figures above). ParkerVision's questioning

was often confusing, failing to differentiate among Dr. Subramanian's multiple categories of

simulations (e.g., Category One simulations; Category Two simulations; simulations in response

to Dr. Steer's criticisms). But Dr. Subramanian testified clearly that ████████████████████

████████████████████████████████ *See* Ex. 4 at 675:6-22; *see also* Ex. 5 at

193:17-20. Dr. Subramanian also testified that ████████████████████████████████

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█████████ Ex. 4 at 452:5-18.[5] The testimony that ParkerVision cites as "recanting" was simply

Dr. Subramanian responding to ParkerVision's confusion and clarifying that he ██████████

████████████████████████████ He did not recant anything.

    4.   ████████████████

ParkerVision next claims that Dr. Subramanian used the wrong mixer ██████████

Mot. 12-13. But Dr. Subramanian ████████████████████████████████████

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████████████████████████████████ Ex. 9 at pp. 159-161; *see, e.g.*, Ex.

3 at 40:23-24 ████████████████████████████; Ex. 1 at 47:4-23

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[5] ParkerVision also cites testimony about Dr. Subramanian ████████████████████

███████████████████████████████████████ Mot. 11 (citing

Ex. 4 at 443:14-17). But that ███

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████████████████████ Ex. 4 at 443:10-13 ████████████████████

███████████████████████████████████████ Intel

has provided ParkerVision with the native files for ████████████ *See* Mot. 17 n.6.

██; *see id.* at 50:1-10, 274:4-14; Ex. 2 at 77:13-22 ██

ParkerVision accuses Dr. Subramanian of "purposefully us[ing] a ██████████████ than what is shown in certain Intel schematics "to mislead the jury" and to "hide the fact that Intel transistors transfer and store non-negligible energy and transfer energy as set forth in the claims." Mot. 13. But ParkerVision cites no support for its serious yet utterly unfounded accusation that Dr. Subramanian intended to "mislead" the jury and "hide" information. He plainly did not.

Moreover, Dr. Subramanian's ████████ could not possibly "mislead" the jury or "hide" any information, including because he reached the same conclusions through simulations using ***Dr. Steer's*** setup. ***First***, he used ████████████████████████████ ██ These simulation results fully supported three of Dr. Subramanian's five noninfringement conclusions. *See* Ex. 9 at pp. 310-320, 428-440, 465-475. ***Second***, Dr. Subramanian used Dr. Steer's simulation setup with, ██

████████████████████████████████ (i.e. "Modified Category Two" simulations). *Id.* ¶859.[6] These more accurate simulations confirmed Dr. Subramanian's fifth noninfringement conclusion—i.e., ██

████████████████████████████████ *Id.* [7] ██████████████████████

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[6] ParkerVision criticizes Dr. Subramanian's Modified Category Two simulations ██████████ ████████ for purportedly not correctly modeling the local oscillator circuitry. These allegations are incorrect for the reasons stated in the next section, but in any event, Dr. Subramanian testified that ██ Ex. 4 at 675:23-676:20. The results again confirmed Dr. Subramanian's conclusions.

[7] Dr. Subramanian does not use simulations for his fourth conclusion. Ex. 9 at pp. 476-490.

Id. ¶859 (red annotations added). ███████████████████████████████

███████████████████████████████ Thus, even using **Dr. Steer's**

███████████████████████ the Intel products do not infringe. ParkerVision has no basis to

assert that Dr. Subramanian's analysis is incorrect let alone that he attempted to mislead the jury.

ParkerVision also accuses Dr. Subramanian—again, citing nothing—of trying to "mislead"

the jury regarding the████████████████████████████████ Mot. 14

("Dr. Subramanian should not be able to *mislead* the jury with his simulations showing

significantly ██

████████ (emphases in original)). But Dr. Subramanian never relies on simulations to quantify

the ██████████████████████████ and ParkerVision does not identify any such

assertions in his report. ParkerVision's reckless charge of "misleading" the jury is unfounded.

Finally, ParkerVision again claims Dr. Subramanian "recanted" testimony about the
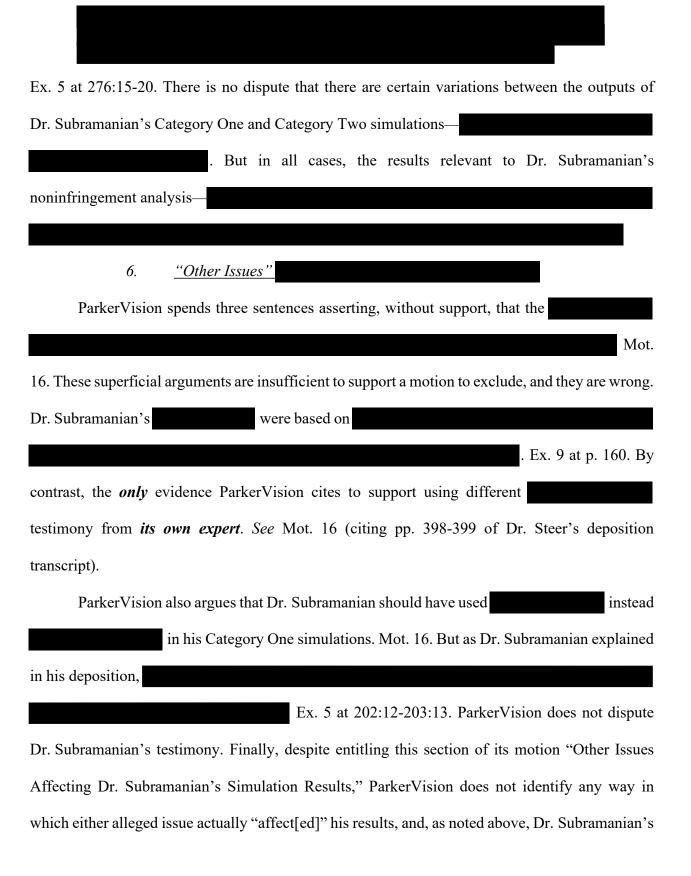
████████ he used in his simulations. Mot. 13. Once again, ParkerVision conflates testimony

about the multiple categories of simulations that Dr. Subramanian performed—e.g., Category One

simulations, Modified Category Two simulations, and simulations re-run in response to Dr. Steer's

criticisms. As relevant here, Dr. Subramanian repeatedly testified that ████████████
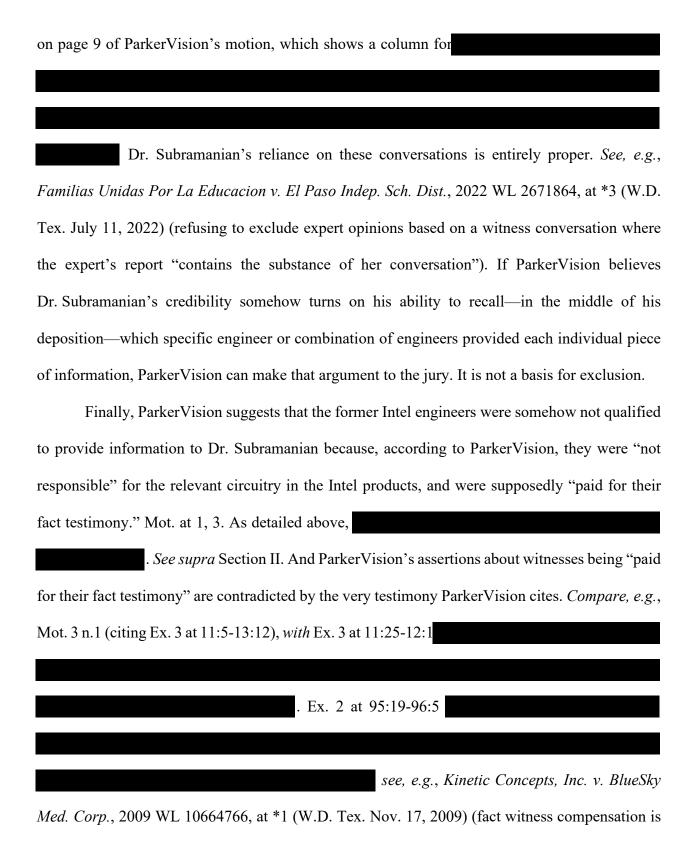
██████████████████████████████ Ex. 4 at

443:18-24; *id.* at 454:22-455:6 ████████████████████████████

██████. By contrast, Dr. Subramanian testified ██████████████████████

████████████████ *Id.* at 455:6-7. Indeed, Dr. Subramanian testified *again* on redirect that

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██ *Id.* at 675:6-22. The

record is clear, and there is no basis for ParkerVision's allegations of wrongdoing.

      5.   ████████████████████████████████

      ParkerVision next criticizes Dr. Subramanian's Category One simulations for ████████

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████████████████ Mot. 14-16. But the ████████ is not part of the ████████

██ Ex. 9 ¶232. It

is entirely common for simulations of highly complex circuits to simplify portions of circuitry *not*

at issue in order to test the circuitry *of interest*. Dr. Subramanian also showed that this

simplification had no impact on his ultimate results or non-infringement conclusions because he

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████████████████████████████ and his ultimate results and conclusions

were not impacted. Ex. 5 at 258:25-259:15. ParkerVision presents no evidence or even assertion

that the LO circuitry affected Dr. Subramanian's conclusions in any material way.

      ParkerVision's only allegation as to the impact of the LO circuitry depends on a *selectively*

edited quotation where Dr. Subramanian testified that ████████████████████████

████████████████████████ Mot. 15 (partially quoting Ex. 5 at 276:7-20). But

ParkerVision *omits* half of Dr. Subramanian's answer (i.e., the portion in *bold italics* below):

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Ex. 5 at 276:15-20. There is no dispute that there are certain variations between the outputs of

Dr. Subramanian's Category One and Category Two simulations—████████████████████

████████████████. But in all cases, the results relevant to Dr. Subramanian's

noninfringement analysis—███

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      6.   *"Other Issues"* ████████████████████

ParkerVision spends three sentences asserting, without support, that the ████████

███ Mot.

16. These superficial arguments are insufficient to support a motion to exclude, and they are wrong.

Dr. Subramanian's ███████████ were based on ███████████████████████

████████████████████████████████. Ex. 9 at p. 160. By

contrast, the **only** evidence ParkerVision cites to support using different █████████

testimony from **its own expert**. *See* Mot. 16 (citing pp. 398-399 of Dr. Steer's deposition

transcript).

ParkerVision also argues that Dr. Subramanian should have used ██████████ instead

███████████ in his Category One simulations. Mot. 16. But as Dr. Subramanian explained

in his deposition, ███

██████████████████ Ex. 5 at 202:12-203:13. ParkerVision does not dispute

Dr. Subramanian's testimony. Finally, despite entitling this section of its motion "Other Issues

Affecting Dr. Subramanian's Simulation Results," ParkerVision does not identify any way in

which either alleged issue actually "affect[ed]" his results, and, as noted above, Dr. Subramanian's

Category Two simulations (based on **Dr. Steer's** assumptions) show that Dr. Subramanian's conclusions are independent of all of ParkerVision's alleged errors.[8]

B.   Dr. Subramanian's Reliance On Conversations With Engineers Is Proper.

ParkerVision claims Dr. Subramanian relied "solely" or "blindly" on "undisclosed opinions" from "undisclosed engineers." Mot. 1-5, 8-9. These criticisms have no merit whatsoever.

As an initial matter, Dr. Subramanian spoke to these engineers as part of his extensive due diligence to learn the details of the Intel products, which also included reviewing documents, deposition transcripts, filings, and simulations—that is precisely what an expert is supposed to do. Dr. Subramanian never testified that he relied "solely" or "blindly" on any of his conversations with former Intel engineers or provided any testimony that could support such an assertion. Most of the testimony ParkerVision cites in support of its accusations merely states that, ███████

███████████████████████████████████████ *See, e.g.*, Mot. 6

(citing testimony that ██████████████████████████████████ In all cases,

Dr. Subramanian relied on his own expertise ███████████████████████████

█████████████ *See, e.g.*, Ex. 5 at 162:14-163:17 ████████████████████

ParkerVision also has not identified anything from these conversations that was "undisclosed." Dr. Subramanian identified in his report ████████████████████

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████████████████ *Id.* at 48:18-49:1 ████████████████████████

███████████████████. Moreover, the facts upon which Dr. Subramanian relies are documented in painstaking detail in his reports. This is clear, for example, from the chart copied

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[8] ParkerVision claims Dr. Subramanian never tested the "combined effect" of its criticisms. Mot. 17. But as shown above, Dr. Subramanian clearly **did** test this "combined effect" through his Category Two simulations, and then again by rerunning his simulations after seeing Dr. Steer's recent criticisms. None of these "errors" affected any of his ultimate results or conclusions.

on page 9 of ParkerVision's motion, which shows a column for █████████████████████

██

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███████████   Dr. Subramanian's reliance on these conversations is entirely proper. *See, e.g.,*

Familias Unidas Por La Educacion v. El Paso Indep. Sch. Dist., 2022 WL 2671864, at *3 (W.D.

Tex. July 11, 2022) (refusing to exclude expert opinions based on a witness conversation where

the expert's report "contains the substance of her conversation"). If ParkerVision believes

Dr. Subramanian's credibility somehow turns on his ability to recall—in the middle of his

deposition—which specific engineer or combination of engineers provided each individual piece

of information, ParkerVision can make that argument to the jury. It is not a basis for exclusion.

Finally, ParkerVision suggests that the former Intel engineers were somehow not qualified

to provide information to Dr. Subramanian because, according to ParkerVision, they were "not

responsible" for the relevant circuitry in the Intel products, and were supposedly "paid for their

fact testimony." Mot. at 1, 3. As detailed above, ███████████████████████████████████

███████████████ . *See supra* Section II. And ParkerVision's assertions about witnesses being "paid

for their fact testimony" are contradicted by the very testimony ParkerVision cites. *Compare, e.g.,*

Mot. 3 n.1 (citing Ex. 3 at 11:5-13:12), *with* Ex. 3 at 11:25-12:1████████████████████████

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████████████████████████████████ . Ex. 2 at 95:19-96:5 ██████████████████████████████

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██   *see, e.g., Kinetic Concepts, Inc. v. BlueSky*

Med. Corp., 2009 WL 10664766, at *1 (W.D. Tex. Nov. 17, 2009) (fact witness compensation is

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proper to cover the "reasonable cost of travel and … time lost"); *see generally Prasad v. MML Invs. Servs., Inc.*, 2004 WL 1151735, at *5 (S.D.N.Y. May 24, 2004) (collecting cases).[9]

In sum, there is no merit to ParkerVision's criticisms about Dr. Subramanian's reliance on Intel's former engineers as one source of information, among many others, for his simulations and expert conclusions. In any case, such criticisms are for the jury and not a basis for exclusion. *See ProTradeNet, LLC v. Predictive Profiles, Inc.*, No. 6:18-CV-38-ADA, 2019 WL 6499488, at *3 (W.D. Tex. Oct. 11, 2019) ("As a general rule, questions relating to the *bases* and *sources* of an expert's opinion affect the *weight* to be assigned that opinion rather than its admissibility and should be left for the [trier of fact's] consideration." (quotations omitted) (emphases in original)).

C.   Rule 26 Does Not Require Producing Simulation Preparation Materials.

Dr. Subramanian stated in his report and at deposition that his noninfringement conclusions are based on a broad array of material, which are clearly described in his reports. He also produced more than two dozen native simulation files for ParkerVision to verify his simulations.

At his deposition, Dr. Subramanian was asked about Dr. Steer's criticisms of his simulations. In response, Dr. Subramanian stated, among other things, that

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[9] ParkerVision's position is surprising because the only witness whose income is based solely on his role in this case   Ex. 11 at 77:10-78:7.

ParkerVision now argues that Dr. Subramanian should have produced ███████████████

███ Mot.

16. This is contrary to Rule 26, which "does not" require experts to disclose "working notes" and

other such material generated while preparing expert reports. *Familias Unidas*, 2022 WL 2671864,

at *3; *see Whitesell Corp. v. Electrolux Home Prod., Inc.*, 2021 WL 796147, at *4 (S.D. Ga. Mar.

2, 2021) (denying exclusion where expert failed to produce an "intermediary working paper"

because "Rule 26 does not require a party to disclose all of its expert's notes, *calculations*, and

preliminary analysis" (quotations omitted)); *Cook v. Rockwell Int'l Corp.*, 580 F. Supp. 2d 1071,

1121-22 (D. Colo. 2006) (denying exclusion where expert did not produce all "working notes,

intermediate results and computer records"); *Kleiman v. Wright*, 2020 WL 6729362, at *6-7 (S.D.

Fla. Nov. 16, 2020) (quotations omitted) (denying exclusion where expert declined to produce

"underlying handwritten notes or *raw testing data*," because Rule 26 does not require an "expert

to *anticipate every criticism* … involved in defending the opinion on cross examination at a

Daubert hearing."). Indeed, ParkerVision has not produced corresponding materials from

Dr. Steer. There is no basis to claim that Dr. Subramanian should have produced this work product.

IV.   **DR. SUBRAMANIAN'S INVALIDITY CONCLUSIONS ARE PROPER**

A.   **ParkerVision's Request For Exclusion Is Directly Contrary To Law.**

ParkerVision requests Dr. Subramanian's invalidity conclusions "be excluded" because he

offers the conclusion that claim elements are found in the prior art "under ParkerVision's

infringement theory." Mot. 20-22. As explained in detail in Intel's concurrently filed opposition

to ParkerVision's Motion for Summary Judgment, this argument is directly contrary to the Federal

Circuit's decision in *01 Communique*, 889 F.3d at 741-42 ("*[t]here [is] nothing improper*" with

argument "that *if [the patentee] attempted to expand the scope of its claims to include systems

[like the accused products], then the claims would be invalid in light of the prior art*"). The two

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district court cases that ParkerVision cites (*Genband US LLC v. Metaswitch Networks Corp.*, 2015 U.S. Dist. LEXIS 176746 (E.D. Tex. Sept. 30, 2015), and *Metaswitch Networks Ltd. v. Genband US LLC*, 2016 U.S. Dist. LEXIS 28289 (E.D. Tex. Mar. 7, 2016)) predate *01 Communique*.[10]

B.   There Is No Basis To Exclude Dr. Subramanian's Invalidity Conclusions.

ParkerVision also moves to exclude certain of Dr. Subramanian's invalidity conclusions on the grounds that he failed to simulate certain prior art. Mot. 23. ParkerVision argues "[g]iven Dr. Subramanian's view that simulations were necessary to show non-infringement, he should have performed similar simulations to show the same elements in the prior art references he relies on." *Id.* 22. ParkerVision's entire argument rests on the premise that *in "Dr. Subramanian's view*," simulations were "*necessary* to show non-infringement." *Id.* That premise is wrong.

First, and most telling, ParkerVision cites nothing from Dr. Subramanian's reports or deposition—indeed, it does not cite anything at all—showing that Dr. Subramanian believes simulations are necessary to show noninfringement. Dr. Subramanian never expressed that view. *Second*, ParkerVision's premise is demonstrably wrong because for all five ultimate noninfringement conclusions in his rebuttal report, Dr. Subramanian relied on evidence *other than simulations*, including ▬▬▬▬▬▬▬▬▬▬▬▬▬

▬▬▬▬▬ *See, e.g.*, Ex. 9 ¶¶346-377, 380, 411-423, 624-631, 796-801, 846-852. *Third*, the simulation results included in Dr. Subramanian's noninfringement report—a rebuttal report— cannot establish what is necessary to make an affirmative case of infringement or invalidity.

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[10] ParkerVision cites two other cases that stand for the proposition that "[e]xperts must undertake their own analyses and may not blindly rely on the opinions of others." *Ravgen, Inc. v. Lab. Corp. of Am. Holdings*, No. 6:20-cv-969-ADA, slip op. 3, Dkt. 230 (W.D. Tex. Oct. 4, 2022); *see In re TMI Litig.*, 193 F.3d 613, 716 (3d Cir. 1999) (expert's "failure to assess the validity of the opinions of the experts he relied upon"). Dr. Subramanian is not *relying* on Dr. Steer's opinions. He is offering the conclusion—endorsed by the Federal Circuit—that if ParkerVision applies its claims broadly enough to cover the Intel products, its claims would cover the prior art and be invalid.

Dr. Subramanian's simulations were offered *as a rebuttal to Dr. Steer*, who relied on simulations in his opening infringement report. Dr. Subramanian's rebuttal simulations say nothing about what is required (or what Dr. Subramanian believes is required) to make an ***affirmative*** case.[11]

ParkerVision can cross-examine Dr. Subramanian on this issue at trial. But ParkerVision cites nothing to justify excluding an expert's invalidity opinions on the grounds that the expert used a certain type of evidence in a noninfringement report but not in an invalidity report. Neither case that ParkerVision cites—*Genband* or *Metaswitch*—stands for that proposition (even assuming they remain good law after *01 Communique* (*see supra* p. 21)). The only language that ParkerVision cites from those cases—that "if an expert disagrees with the principles and methods embodied in an adverse party's infringement theory, that expert is not permitted under Rule 702 to apply the adverse party's infringement theory to affirmatively conclude that the patent is invalid" (Mot. 23)—says nothing about whether an expert's invalidity report must rely on the same type of evidence relied upon in the expert's noninfringement report. Indeed, another opinion issued by the *Metaswitch* court on the same day in the same case directly undermines ParkerVision's argument: "[t]he degree of consistency between [the expert's] two analyses may be fertile ground for cross examination or rebuttal, but *this Court will not strike his opinions under Rule 702 because they are not clearly contradictory nor inconsistent with his stated analysis*." *Metaswitch Networks Ltd. v. Genband US LLC*, 2016 WL 874772, at *2 (E.D. Tex. Mar. 7, 2016).

V. CONCLUSION

For the foregoing reasons, ParkerVision's motion should be denied in its entirety.

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[11] By contrast, Dr. Steer violated his own methodology when he failed to use simulations to show conception/reduction to practice (C/RTP). *See* Dkt. 175 at 13-14. Dr. Steer had the ***affirmative*** burden of showing infringement and relied on simulations to try to make that showing. But for C/RTP (where he also had the affirmative burden), Dr. Steer did not include simulations or make any showing that ParkerVision's circuits stored "non-negligible amounts of energy." *Id.* at 11-15.

Dated: November 15, 2022   Respectfully submitted,

                                             /s/ J. Stephen Ravel

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<u>CERTIFICATE OF SERVICE</u>

I hereby certify that all counsel of record who are deemed to have consented to electronic service are being served with a copy of the foregoing document via electronic mail on November 15, 2022.

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/s/ J. Stephen Ravel
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